

poured on the ground, where they may cool in the open Air, have, like the Colours of Water-bubbles, been a little changed by viewing them at divers obliquities, and particularly that a deep blue, or violet, when viewed very obliquely, hath been changed to a deep red. But the changes of these Colours are not so great and sensible as of those made by Water. For the Scoria or vitrified part of the Metal, which most Metals when heated or melted do continually protrude, and send out to their surface, and which by covering the Metals in form of a thin glassy skin, causes these Colours, is much denser than Water; and I find that the change made by the obliquation of the Eye is least in Colours of the densest thin substances.

O B S. XX.

As in the ninth Observation, so here, the Bubble, by transmitted Light, appeared of a contrary Colour to that which it exhibited by reflexion. Thus when the Bubble being looked on by the Light of the Clouds reflected from it, seemed red at its apparent circumference, if the Clouds at the same time, or immediately after, were viewed through it, the Colour at its circumference would be blue. And, on the contrary, when by reflected Light it appeared blue, it would appear red by transmitted Light.

O B S. XXI.

By wetting very thin plates of Muscovy-glass, whose thinness made the like Colours appear, the Colours became

became more faint and languid; especially by wetting the plates on that side opposite to the Eye: But I could not perceive any variation of their species. So then the thickness of a plate requisite to produce any Colour, depends only on the density of the plate, and not on that of the ambient medium: And hence, by the 10th and 16th Observations, may be known the thickness which Bubbles of Water, or Plates of Muscovy-glass, or other substances, have at any Colour produced by them.

O B S. XXII.

A thin transparent Body, which is denser than its ambient medium, exhibits more brisque and vivid Colours than that which is so much rarer; as I have particularly observed in the Air and Glass. For blowing Glass very thin at a Lamp-furnace, those plates incompassed with Air did exhibit Colours much more vivid than those of Air made thin between two Glasses.

O B S. XXIII.

Comparing the quantity of Light reflected from the several Rings, I found that it was most copious from the first or inmost, and in the exterior Rings became gradually less and less. Also the whiteness of the first Ring was stronger than that reflected from those parts of the thinner medium which were without the Rings; as I could manifestly perceive by viewing at a distance the Rings made by the two Object

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Glasses,